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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/981,715	10/19/2001	Pascal Agin	Q66778	6061

23373 7590 05/24/2005  
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EXAMINER
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BARNIE, REXFORD N

ART UNIT	PAPER NUMBER
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2643

DATE MAILED: 05/24/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

09/981,715

Applicant(s)

AGIN, PASCAL

Examiner

REXFORD N. BARNIE

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☐ Responsive to communication(s) filed on 09 December 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-14 and 21-24 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) 15-20 is/are allowed.
- 6) ☐ Claim(s) 1-14 and 21-24 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

*R. Barrie*  
REXFORD BARNIE  
PRIMARY EXAMINER

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.

- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

## **DETAILED ACTION**

### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claim 21 is rejected under 35 U.S.C. 102(e) as being anticipated by Walker et al. (US Pat# 6,320,918).

The applied reference has a common assignee with the instant application. Based upon the earlier effective U.S. filing date of the reference, it constitutes prior art under 35 U.S.C. 102(e). This rejection under 35 U.S.C. 102(e) might be overcome either by a showing under 37 CFR 1.132 that any invention disclosed but not claimed in the reference was derived from the inventor of this application and is thus not the invention "by another," or by an appropriate showing under 37 CFR 1.131.

Regarding claim 21, Walker et al. teaches a procedure for reducing interference in the transmission of an electrical communication signal in (see col. 5).

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the

invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1- 3 and 21-25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Heinzeiman et al. (US Pat# 6,754,277) in view of Minde et al. (US Pat# 6,157,830) or Bullock et al. (US Pat# 5,764,651).

Regarding claims 1 and 21, Heinzeman teaches an error protection system for a wireless system wherein channel coding would be used to protect integrity of bits. According to Heinzeman in (see fig. 6 and col. 6), a power coding method can be used under harsh radio condition based on an average BER analysis. Heinzeman fails however to specify time factors or duration when factoring an average measurement.

Minde et al. teaches a speech quality measurement in mobile communication networks based on radio link parameters wherein time frames or duration can be changed based in part on speech quality in (see cols. 6-7).

Bullock teaches a BIT ERROR rate detection system wherein duration of BER can be monitored and regulated in (see cols. 3-6).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the teaching of Minde or Bullock into that of Heinzeiman thus making it possible to control of bits of information efficiently based in part on detected channel quality.

Regarding claim 2, the combination teaches the claimed subject matter in (see col. 6 of Bullock).

Regarding claim 3, The combination teaches the claimed subject matter in (see col. 6 lines 35-36 of Minde).

Regarding claims 22-25, see the explanation as set forth regarding claim 1-3.

Claims 4-10 and 12-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Heinzeiman et al. (US Pat# 6,754,277) in view of Minde et al. (US Pat# 6,157,830) or Bullock et al. (US Pat# 5,764,651) and further in view of Dohi et al. (US Pat# 6,341,224).

Regarding claim 4, the combination fails to teach SIR measurements when determining quality of a communication channel or link. Dohi teaches a power controller for mobile communications system wherein a signal to interference threshold is dynamically moved based on an error rate measurement in (see cols. 4-6) including BER, SIR and FER.

Therefore, it would have been obvious to one of ordinary skill in the art at the time invention was made to incorporate the teaching of Dohi into that of the combination thus making it possible to dynamically controlled signal level and its quality.

Regarding claim 5, The combination including Heinzelman et al. teaches being able to use any coding means in (see col. 3) based on channel conditions.

Regarding claims 6-9, The combination renders the claimed subject matter obvious.

Regarding claim 10, the combination including Minde teaches usage of an exponential factor as a function of time in (see col. 5 lines 22-44 of Minde et al.).

Regarding claims 12-14, the combination teaches monitoring channel control parameters and dynamically making adjustments to improve quality of communication. Upgrading of uplink and downlink parameters to improve communication is well known.

Claim 11 is rejected under 35 U.S.C. 103(a) as being unpatentable over Heinzeiman et al. (US Pat# 6,754,277) in view of Minde et al. (US Pat# 6,157,830) or Bullock et al. (US Pat# 5,764,651) and further in view of Dohi et al. (US Pat# 6,341,224) and further in view of Chennakeshu et al. (US Pat# 5,406,593).

Regarding claim 11, The combination fails to teach the claimed subject matter but Chennakeshu et al. teaches a method of estimating a communication channel wherein equations shown in (see cols. 4-8) can be used in determining and improving signal quality.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the teaching of Chennakeshu et al. into that of the combination thus making it possible to improve signal quality.

#### ***Allowable Subject Matter***

Claims 15-20 are allowed.

#### ***Response to Arguments***

Applicant's arguments filed on 12/09/2004 have been fully considered but they are not persuasive.

The applicant's amendment in regard to claims 15-20 puts it in condition for allowance.

The applicant argued that the combination as set forth in the rejection of the claimed subject matter fails to teach the claimed subject matter, improper and lacks motivation.

The examiner disagrees because the applied references are directed to measuring BER and then making decisions or adjustments based on such measurements. Furthermore, according to Heinzeman, his teaching can be applied in an environment such as a GSM or wireless channel environment. The examiner supplemented the teaching of Heinzeman simply to teach the ability to configure BER in part based on time factors and radio/network conditions.

The applicant argued that the combination including Bullock fail to render the claimed subject matter obvious.

The examiner disagrees because the explanation as set forth was based on a combination of references but has been attacked individually. Bullock is directed to a method of BER detection and thus, relevant.

### ***Conclusion***

**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any

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extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to **REXFORD N BARNIE** whose telephone number is 571-272-7492. The examiner can normally be reached on M-F 9:00-6:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, CURTIS KUNTZ can be reached on 571-272-7499. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

PRIMARY EXAMINER  
REXFORD BARNIE  
05/15/05

  
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